

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: Hydrogen peroxide 30% solution

CAS-No.: 7722-84-1 Product Number: F77467

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

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1.4 Emergency telephone number

Emergency Phone #: +44 (0)845 1200 506

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to Regulation (EC) No1272/2008; Acute toxicity, Oral (Category 4), Serious eye damage (Category 1)

According to European Directive 67/548/EEC as amended: Harmful if swallowed. Risk of serious damage to eyes.

# 2.2 Label elements

Pictogram



Signal word Danger

Hazard statement(s): H302 Harmful if swallowed. H318 Causes serious eye damage.

Precautionary statement(s): P280 Wear protective gloves/ eye protection/ face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



Hazard symbol(s):

R-phrase(s): R22 Harmful if swallowed. R41 Risk of serious damage to eyes.

**S-phrase(s):** S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S39 Wear eye/face protection.

2.3 Other hazards - no data available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

# Hydrogen peroxide

Formula:  $H_2O_2$  Molecular Weight: 34.01 CAS-No.: 7722-84-1

EC-No.: 231-765-0 Index-No.: 008-003-00-9

#### 3.2 Mixtures

Component	Classification	Concentration
Hydrogen	Ox. Liq. 1; Acute Tox. 4; Skin Corr. 1A; H271, H302,	>= 30 - <= 32 %
peroxide	H314, H332 O, C, R 5 - R 8 - R20/22-R35	
Water	-	>=70%
Potassium stannate	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	< 0.1 %
	Xi, R36/37/38	

# 4. FIRST AID MEASURES

## 4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact:** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes.

**If swallowed:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.

- 4.2 Most important symptoms and effects, both acute and delayed: no data available
- 4.3 Indication of immediate medical attention and special treatment needed: no data available

## 5. FIRE-FIGHTING MEASURES

## 5.1 Extinguishing media

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture: no data available

- **5.3** *Precautions for fire-fighters:* Wear self contained breathing apparatus for fire fighting if necessary.
- **5.4 Further information:** Use water spray to cool unopened containers.

#### 6. ACCIDENTAL RELEASE MEASURES

- **6.1** Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
- **6.2** *Environmental precautions:* Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
- **6.3 Methods and materials for containment and cleaning up:** Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).
- **6.4 Reference to other sections:** For disposal see section 13.

## 7. HANDLING AND STORAGE

- **7.1** *Precautions for safe handling:* Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition No smoking. Normal measures for preventive fire protection.
- **7.2** Conditions for safe storage, including any incompatibilities: Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- 7.3 Specific end uses: no data available.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Update
Hydrogen peroxide	7722-84-1	STEL	2ppm 2.8mg/m <sup>3</sup>	2005-04-06
Hydrogen peroxide	7722-84-1	TWA	1ppm 1.4mg/m <sup>3</sup>	2005-04-06

UK. EH40 WEL - Workplace Exposure Limits

# 8.2 Exposure controls

**Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

# Personal protective equipment

**Eye/face protection:** Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Body Protection:** Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

a) Appearance: Form: Liquid Colour: Colourless

b) Odour:

c) Odour Threshold:

no data available

no data available

no data available

e) Melting/freezing point: Melting point/range: no data available

f) Initial boiling point and boiling range: no data available

g) Flash point: no data availableh) Evaporation rate: no data availablei) Flammability (solid, gas): no data available

j) Upper/lower flammability or explosive limits: no data available

k) Vapour pressure: no data available
 l) Vapour density: no data available
 m) Relative density: 1.11 g/cm3 at 25 °C
 n) Water solubility: no data available

o) Partition coefficient: n-octanol/water: no data available

p) Autoignition temperature: no data available q) Decomposition temperature: no data available r) Viscosity: no data available s) Explosive properties: no data available t) Oxidizing properties: no data available 9.2 Other safety information: no data available

#### 10. STABILITY AND REACTIVITY

10.1 Reactivity: no data available

10.2 Chemical stability: Stable under recommended storage conditions. Contains the following

stabiliser(s): Potassium stannate (<0.1 %)

10.3 Possibility of hazardous reactions: no data available

10.4 Conditions to avoid: no data available

10.5 Incompatible materials: Zinc, Powdered metals, Iron, Copper, Nickel, Brass, Iron and iron salts.

10.6 Hazardous decomposition products: Other decomposition products - no data available

#### 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrogen

peroxide)

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. Material is extremely destructive to the tissue of

the mucous membranes and upper respiratory tract.

**Ingestion** Harmful if swallowed. Causes burns.

**Skin** May be harmful if absorbed through skin. Causes skin burns.

**Eyes** Causes eye burns.

Signs and Symptoms of Exposure: no data available

Additional Information: RTECS: Not available

## 12. ECOLOGICAL INFORMATION

12.1 Toxicity: no data available

12.2 Persistence and degradability: no data available

12.3 Bioaccumulative potential: no data available

12.4 Mobility in soil: no data available

12.5 Results of PBT and vPvB assessment: no data available

12.6 Other adverse effects: Harmful to aquatic life.

#### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

**Product:** Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.

## 14. TRANSPORT INFORMATION

#### 14.1 UN-Number

ADR/RID: 2014 IMDG: 2014 IATA: 2014

## 14.2 UN proper shipping name

ADR/RID: HYDROGEN PEROXIDE, AQUEOUS SOLUTION IMDG: HYDROGEN PEROXIDE, AQUEOUS SOLUTION IATA: HYDROGEN PEROXIDE, AQUEOUS SOLUTION

#### 14.3 Transport hazard class(es)

ADR/RID: 5.1 (8) IMDG: 5.1 (8) IATA: 5.1 (8)

#### 14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

#### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for users: EMS-No: F-H, S-Q

#### 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture: no data available

15.2 Chemical Safety Assessment: no data available

## 16. OTHER INFORMATION

Acute Tox. Acute toxicity, Eye Irrit. Eye irritation, H271 May cause fire or explosion; strong oxidiser. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. Ox. Liq. Oxidizing liquids, Skin Corr. Skin corrosion, Skin Irrit. Skin irritation, STOT SE Specific target organ toxicity - single exposure, C Corrosive, R 5 Heating may cause an explosion. R 8 Contact with combustible material may cause fire. R20/22 Harmful by inhalation and if swallowed. O Oxidising, Xi Irritant, R35 Causes severe burns. R36/37/38 Irritating to eyes, respiratory system and skin.